

What is claimed is:

1. A nonwoven fabric containing sheath-core type bicomponent fibers in each of which:

the sheath portion is formed by polyethylene, and the thickness of the sheath portion is changed irregularly and at random along the axial direction and circular direction of the fiber;

the core portion is formed by polyester, and the configuration of the core portion is not substantially changed along the axial direction of the fiber.

2. The nonwoven fabric according to claim 1 wherein the sheath-core type bicomponent fiber is continuous.

3. The nonwoven fabric according to claim 1 wherein the polyethylene is the mixture of the first polyethylene polymerized by metallocene catalyst and the second polyethylene polymerized by Ziegler-Natta catalyst.

4. The nonwoven fabric according to claim 3 wherein the second polyethylene is low density polyethylene.

5. The sheath-core type bicomponent fiber which is provided into claim 1.

6. A composite material comprised of the nonwoven fabric of claim 1 and a polyolefin film, which is adhering the nonwoven fabric to the polyolefin film by melting or softening the sheath portion.

7. A method of the nonwoven fabric comprised of:

preparing the polyester, and the polyethylene mixed the first polyethylene polymerized by metallocene catalyst and the second

polyethylene polymerized by Ziegler-Natta catalyst;

providing the polyester to each core hole of sheath-core type spinning holes and the polyethylene to each sheath hole of the sheath-core type spinning holes;

accumulating the sheath-core type bicomponent continuous fibers obtained by melt spinning the polyester and the polyethylene from the sheath-core type spinning holes.

8. The method of the nonwoven fabric according to claim 7 wherein the melt flow rate (MFR) of the polyethylene is 16-21 grams per 10 minutes.

9. The method of the nonwoven fabric according to claim 7 wherein the melt spinning speed is at a rate of 3000-4000 meters per a minute.